



▶ Polycom® Recording Studio™
(PRS) 2000 Appliance
Administrator Guide

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About this Guide

This introduction provides a brief overview of the *Polycom PRS 2000 Administrator Guide*, describes the conventions used in this manual, and explains how to get additional information or support.

Purpose

The *Polycom PRS 2000 Administrator Guide* describes how to configure and use the Polycom PRS 2000 appliance to capture, archive, and publish live video, audio, and presentation content.

Documentation

The *Polycom PRS 2000 Administrator Guide* is part of the Polycom PRS 2000 PRS 2000 documentation set, which includes:

- *Polycom PRS 2000 Administrator Guide* - This document.
- *Polycom PRS 2000 Getting Started Guide* - Describes set-up and installation of the Polycom PRS 2000 appliance.
- *Polycom PRS 2000 Release Notes* - Describes the product release. This document also identifies known problems and their workarounds, information not covered in the manuals or that has been modified since publication, as well as problems that have been fixed since previous releases.

Audience

This guide is primarily for Polycom PRS 2000:

- Administrators - Responsible for configuring and managing the Polycom appliance. You should have a working knowledge of capture basics, video peripheral ports and communications, network protocols, media streaming and editing. You should also be familiar with Web fundamentals, such as URLs and HTML.

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Recognizing that technology alone cannot solve today's complex challenges, Polycom Global Services provides the industry's best technical support staff and programs to let you concentrate on the task at hand. Polycom users can select from a variety of support solutions to obtain the level of support that best meets their needs.

Before contacting your Polycom Global Services representative for technical assistance, gather as much information as possible about your situation. Any information you can provide helps us assess the problem and develop an appropriate solution.

Polycom Global Services Telephone

If you have comments or questions about Polycom or if you need technical assistance, contact:

- Polycom Global Services in U.S.A. 800-827-7782
- Denver metro or outside U.S.A. +1-303-223-5223

About the Polycom PRS 2000

This chapter introduces the Polycom PRS 2000 and outlines the hardware specifications for the appliance. This chapter includes the following sections:

- [About the Polycom Recording Studio](#)
- [Hardware Specifications](#)

About the Polycom Recording Studio

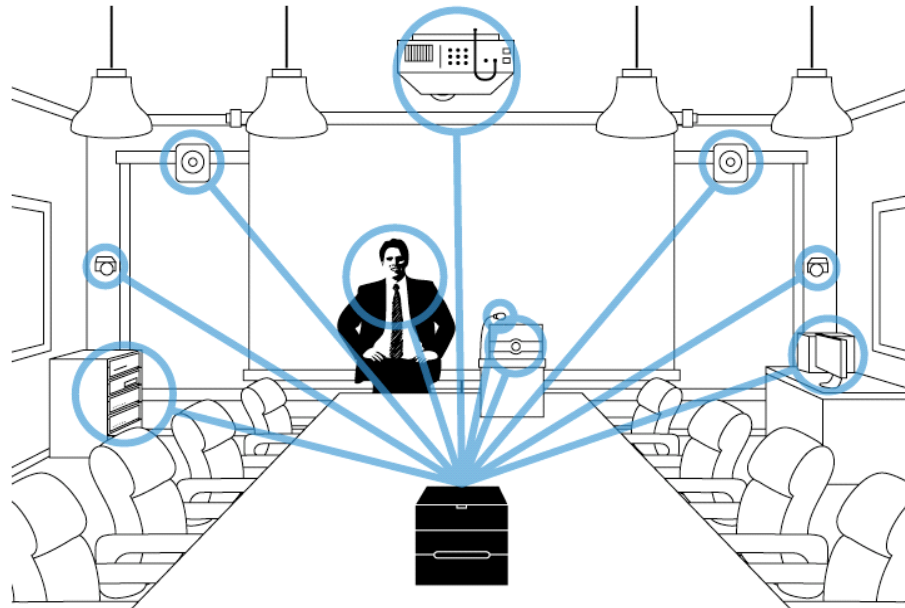
The Polycom Recording Studio (PRS) 2000 is a powerful presentation recording integrated hardware and software appliance that will enhance the effectiveness and reach of any educational, corporate, or public event communication by capturing and streaming real-time rich media presentations with DVD quality video and high fidelity sound.

The Polycom PRS 2000 appliance is ideal for use by enterprises, educational institutions, government organizations, and training groups.

Organizations can deploy the Polycom PRS 2000 appliance in meeting and conference rooms or bring it to off-site events to record and stream live and on demand executive briefings, training sessions, product demonstrations, global announcements, marketing communications, and more.

The Polycom PRS 2000 appliance accepts and synchronizes feeds from any A/V equipment available, including microphones, cameras, VCR/DVD players, document cameras, and other video conferencing equipment.

The appliance can capture a computer screen output as a video stream, allowing the presenter to demonstrate any application on their computer. Unique to the Polycom PRS 2000 appliance is its ability to perform text recognition on the RGB source for automatic text extraction and slide detection.



Hardware Specifications

The following hardware specifications apply to the Polycom Recording Studio:

Type	Specifications
Video Input	Analog RGB & DVI up to 1280 x 1024 Any combination of 3 of the following inputs: <ul style="list-style-type: none"> • 2 S-Video • 4 Composite video via RCA
Video Output	Dual DVI-I (VGA with adapter)
Audio Input	1 balanced with Preamplifier and Phantom Power for Microphone via XLR connectors 2 Stereo unbalanced via 2 RCA connectors 1 Stereo balanced with attenuator via 2 XLR connectors
Audio Output	1 Stereo balanced via 2 XLR connectors 1 Headphone

Type	Specifications
Connectivity	2 USB 2.0 ports (front) 6 USB 2.0 ports (back) Firewire/IEEE 1394 port (for storage extension)
Storage	500 GB
Optical Drive	16x DVD/CD R/RW
Dimensions	W x L x H = 8.7 in. x 12.8 in x 8.3 in (220mm x 325mm x 210mm)

Polycom Recording Studio Software

This chapter explains the use of the Polycom Recording Studio software, particularly the Operator Interface:

- [About the Polycom Recording Studio Software](#)
- [Beginning a New Session](#)
- [Using the Session Properties](#)
- [Capturing Your Experience](#)
- [Recording Your Capture](#)
- [Using Expression Encoder](#)

About the Polycom Recording Studio Software

The Polycom PRS 2000 Software is Polycom's presentation capture software which runs on the Polycom PRS 2000 appliance. The Polycom PRS 2000 Software consists of two interfaces; the Operator Interface and the Touch Interface.

The **Operator Interface**, covered in this chapter, is used to create mixes for different output experiences and to define presets that will be used for recording a presentation. Different configurations can be saved for each individual presenter or situation.

The **Touch Interface**, covered in the next chapter, is a simplified interface designed for the presenter. It provides all the functionality required for a presenter to create a recording and to switch among various views using the presets created within the Operator Interface.

Beginning a New Session

Getting Started

After the Polycom PRS 2000 hardware is configured, you can begin creating mixes for your recordings. Launch the Polycom PRS 2000 Operator Interface by double-clicking the PRS 2000 shortcut on your Windows desktop.

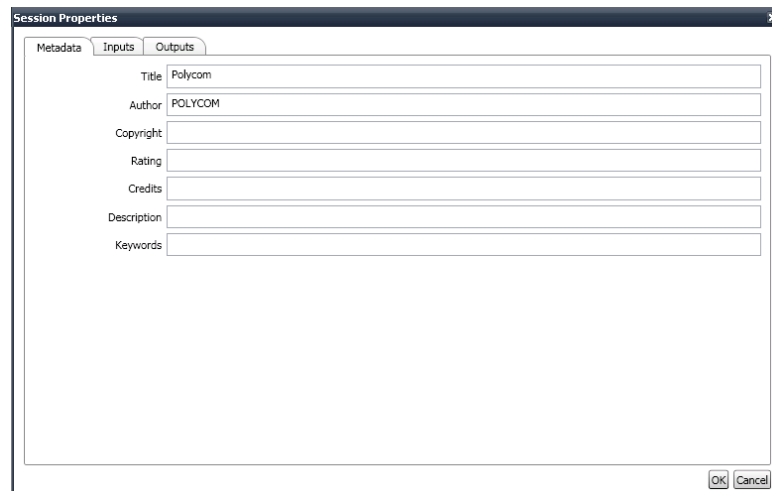


Using the Session Properties

The Polycom PRS 2000 Operator Interface will launch and the Session Properties window will appear. You must create a configuration prior to using the Polycom PRS 2000. The Session Properties window includes tabs for **Metadata**, **Inputs**, and **Outputs**.

Metadata

Metadata is the information about a Polycom PRS 2000 configuration. It contains information describing a session's Title, Author, Copyright, Rating, Credits, Description and Keywords. Metadata is used to facilitate the understanding, characteristics, and management usage of data.

A screenshot of the "Session Properties" dialog box, showing the "Metadata" tab. The dialog has three tabs: "Metadata", "Inputs", and "Outputs". The "Metadata" tab is active and contains several text input fields with labels: "Title" (containing "Polycom"), "Author" (containing "POLYCOM"), "Copyright", "Rating", "Credits", "Description", and "Keywords". At the bottom right of the dialog are "OK" and "Cancel" buttons.

Field	Value
Title	Polycom
Author	POLYCOM
Copyright	
Rating	
Credits	
Description	
Keywords	

Inputs

Any audio and video input devices connected to Polycom PRS 2000 appliance are detected and displayed under the Inputs tab. Some typical inputs include:

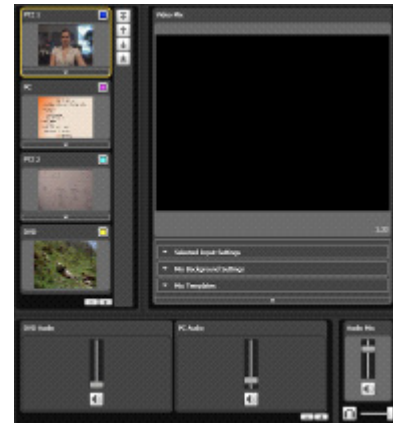
- Presenter Laptop
- Microphone
- Pan-Tilt-Zoom (PTZ) Camera
- DVD Player
- Document Camera

By checking the devices under the Use column, selected devices will appear in the Polycom PRS 2000 Operator Interface as available inputs that can be captured in a presentation.

Examples

In the example below, we have a configuration type : 2 PTZ cameras, a DVD player and a laptop. The Polycom PRS 2000 Operator Interface (right) displays all four video inputs and both audio inputs.

Use	Type	Name
<input checked="" type="checkbox"/>	Video Device	PTZ 1
<input checked="" type="checkbox"/>	Video Device	PTZ 2
<input checked="" type="checkbox"/>	Video Device	DVD
<input checked="" type="checkbox"/>	Rgb Device	PC
<input type="checkbox"/>	Mic Device	Audio Source 0
<input type="checkbox"/>	Audio Device	Audio Source 1
<input checked="" type="checkbox"/>	Audio Device	DVD Audio
<input checked="" type="checkbox"/>	Audio Device	PC Audio



In the example below, the DVD video and DVD audio sources have been removed. The Polycom Recording Studio Operator Interface (right) no longer displays the DVD video or DVD audio as available inputs.

Use	Type	Name
<input checked="" type="checkbox"/>	Video Device	PTZ 1
<input checked="" type="checkbox"/>	Video Device	PTZ 2
<input type="checkbox"/>	Video Device	DVD
<input checked="" type="checkbox"/>	Rgb Device	PC
<input type="checkbox"/>	Mic Device	Audio Source 0
<input type="checkbox"/>	Audio Device	Audio Source 1
<input type="checkbox"/>	Audio Device	DVD Audio
<input checked="" type="checkbox"/>	Audio Device	PC Audio



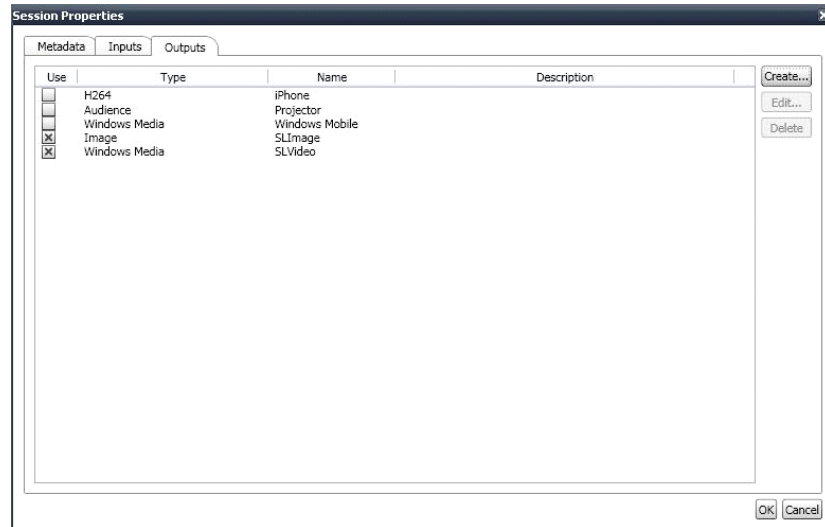
Outputs

Under the Outputs tab are the possible output Types. The selected outputs will determine what experiences will be created for the end user when a recording is completed (i.e. experiences for the web, Windows Mobile and iPhone). With the Polycom PRS 2000 appliance, all output types are created simultaneously and are available immediately after completing a recording.

In the example below, the selected output types are:

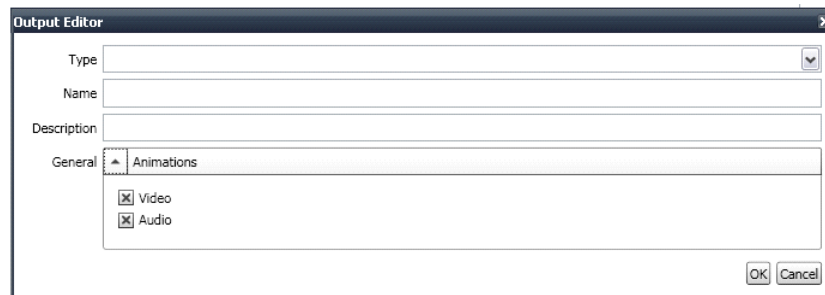
- **H.264** for an iPhone experience or other experience on any H.264-supported device or player. H.264 output is currently not supported for streaming
- **Windows Media** for a Windows Mobile experience or Silverlight experience for the web
- **Image** for screenshot capture for thumbnail generation

- **Audience** for the viewer experience, typically displayed from a projector

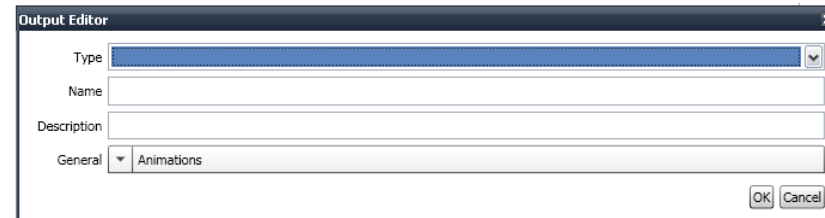


Creating Different Experiences with Polycom PRS 2000 Outputs

- 1 In the **Output** tab of the Session Properties window, click the button. The following window will appear:



- 2 Select an output type from the **Type** dropdown menu.



- 3 In the **Name** field, enter a name for the output.
- 4 In the **Description** field, enter a brief description of the output.

- 5 In the **General** section, specify whether Animations (fluid transitions between audio and video) are on or off by checking the appropriate check boxes.



NOTE: The options in steps 3 - 5 above (Name, Description and General/Animations) are common to all output types in the Polycom PRS 2000 system. The following are configurable options specific to each individual output type in the Polycom PRS 2000 system.

Image

The Image output type provides a library of snapshots taken during the recording. You can specify the frequency the snapshots are taken (in seconds) by entering a value in the Minimum Spacing field.

This type of output is used to provide thumbnail chapters for the Polycom Rich Experience Player (see the paragraph below on Silverlight).

The screenshot shows the 'Output Editor' dialog box with the following settings:

- Type: Image
- Name: (empty field)
- Description: (empty field)
- Profile: Width 640, Height 480, Frame Rate 1
- Processing:
 - Optical Character Recognition: Enabled
 - Generate Chapter Events
 - Generate Search Events
- Post-Capture Action: (empty dropdown)
- Flags: (empty field)
- Distribution:
 - Archive: Enabled
 - Minimum Spacing: 5
- General: Animations

Buttons: OK, Cancel

Windows Media

The Windows Media output type creates a recording viewable in any player or device that supports Windows Media Video (.wmv) files. This includes playback in Windows Media Player, a Windows Media Player embedded in a web page, or Windows Mobile devices.

The screenshot shows the 'Output Editor' dialog box with the following configuration:

- Type: Windows Media
- Name: (empty)
- Description: (empty)
- Profile: Mid Resolution - Mid Frame Rate - High Bit Rate
- Width: 640, Height: 480, Frame Rate: 15, Video Bit Rate (Kbps): 700, Audio Bit Rate (Kbps): 48
- Flags: (empty)
- Distribution:
 - Archive: Enabled
 - Broadcast (Pull): (empty)
 - Broadcast (Push): (empty)
- General: Animations

Buttons: OK, Cancel

The **Distribution** section of the Windows Media output type configuration allows users to dictate whether they want .wmv files archived and whether they wish to enable Pull or Push broadcasting to or from the Windows Media Server. Pull broadcasting requires that you provide your HTTP port. Any computer with access to that port can then access the content. Push requires a URL and template URL, as well as authorized user credentials for access.

The detailed view of the 'Distribution' section shows the following options:

- Archive:** Enabled
- Broadcast (Pull):** Enabled, Port: 8500
- Broadcast (Push):** Enabled, URL: http://, Template URL: (empty), User Name: (empty), Password: (empty), Auto Destroy

Buttons: OK, Cancel

Raw

The Raw output type is for archive-quality video. Raw files are uncompressed and are larger in file size, but are uncompromised in quality.

The screenshot shows the 'Output Editor' dialog box with the following settings:

- Type: Raw (Uncompressed Archive)
- Name: (empty text field)
- Description: (empty text field)
- Profile: Width 640, Height 480, Frame Rate 15
- Flags: (empty text field)
- Distribution: Archive (expanded), with an 'Enabled' checkbox checked.
- General: Animations

MP3

The MP3 output type is an audio-only output type for playback on any device that supports MP3s. This output type is ideal for podcasting a recording.

The screenshot shows the 'Output Editor' dialog box with the following settings:

- Type: MP3
- Name: (empty text field)
- Description: (empty text field)
- Profile: Bit Rate (Kbps) 128
- Flags: (empty text field)
- Distribution: Archive (expanded), with an 'Enabled' checkbox checked.
- Acknowledgement: Using L.A.M.E encoding engine (www.mp3dev.org).
- General: Animations

H.264

The H.264 output type creates a recording viewable in any player or device that supports the H.264 codec. This includes playback for iPods and iPhones.

The screenshot shows the 'Output Editor' dialog box with the following settings:

- Type: H.264
- Name: (empty)
- Description: (empty)
- Profile: iPhone / iPod
- Width: 640
- Height: 480
- Frame Rate: 15
- Video Bit Rate (Kbps): 700
- Audio Bit Rate (Kbps): 64
- Flags: (empty)
- Distribution: Archive
- Enabled
- General: Animations

Buttons: OK, Cancel



NOTE: The Audience output can be set to a maximum resolution of 1024 x 768 pixels.

Configuring the Polycom Rich Experience Player Output

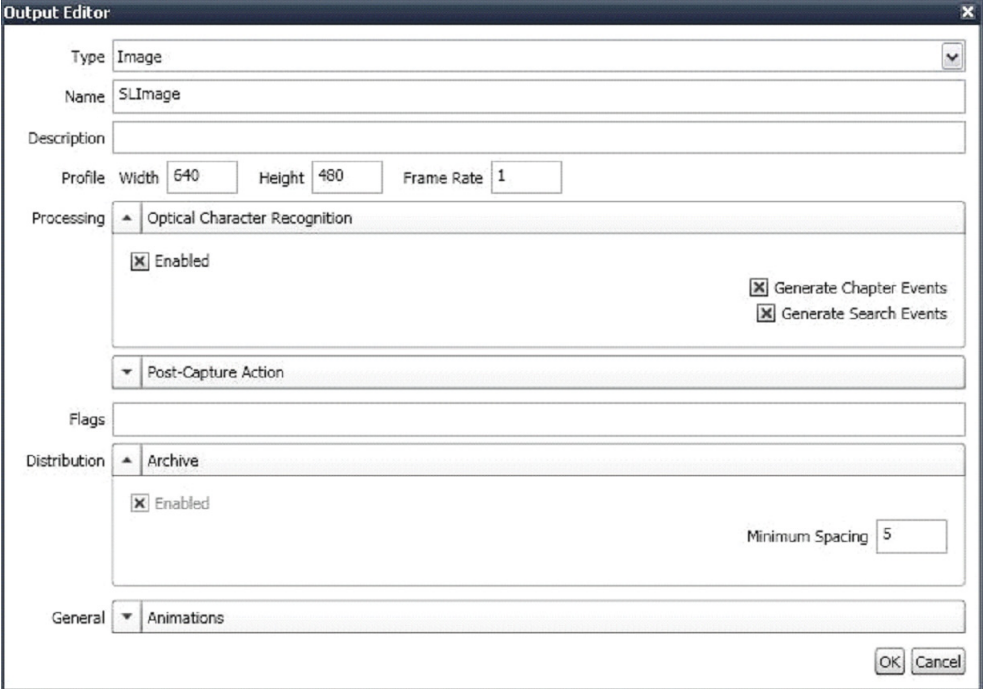
The Polycom PRS 2000 appliance can output a customizable, rich experience player which empowers the end-user to view the experience the way they want to view it. Features of this output type include:

- Indexed, searchable chapters
- Chapter thumbnails
- Scalable and moveable video windows
- Scalable player to fit any user's desktop environment

To create a Polycom Rich Experience Player output type, follow the steps below:

- 1 Create an output using the Image type.

2 Name it: **SLImage**.



The screenshot shows the 'Output Editor' dialog box with the following settings:

- Type: Image
- Name: SLImage
- Description: (empty)
- Profile: Width 640, Height 480, Frame Rate 1
- Processing: Optical Character Recognition
 - Enabled
 - Generate Chapter Events
 - Generate Search Events
- Post-Capture Action: (empty)
- Flags: (empty)
- Distribution: Archive
 - Enabled
 - Minimum Spacing: 5
- General: Animations

Buttons: OK, Cancel

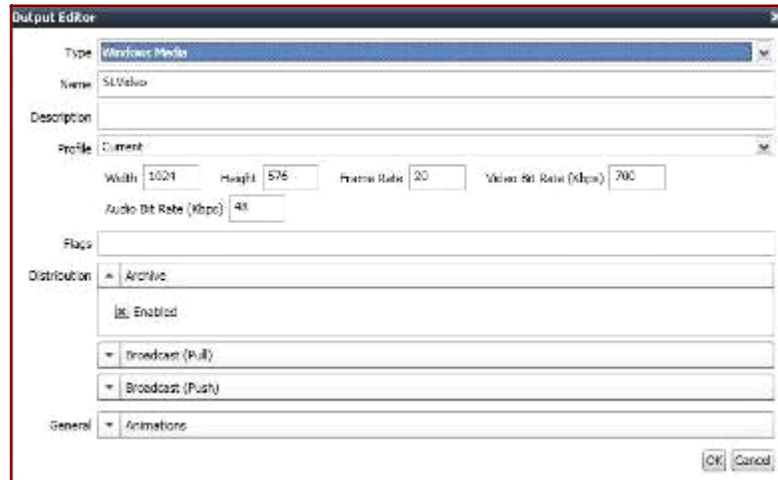
Ensure that **OCR**, **Generate Chapter Events** and **Generate Search Events** are all checked. You can also edit the resolution of your image in the Profile properties.



NOTE: This Image output is essential for Optical Character Recognition (OCR). The Polycom PRS 2000 appliance will scan and capture the characters displayed in each image captured. The contents captured from each image will become searchable keywords for the player.

3 Create a second output using the Windows Media type.

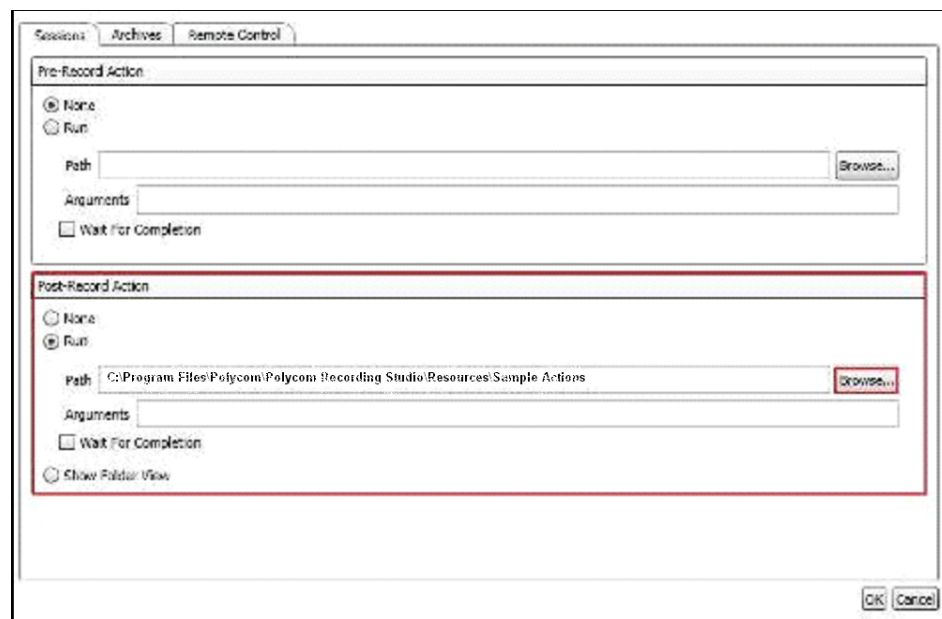
- 4 Name this second output: SLVideo. Note: archiving must be enabled.



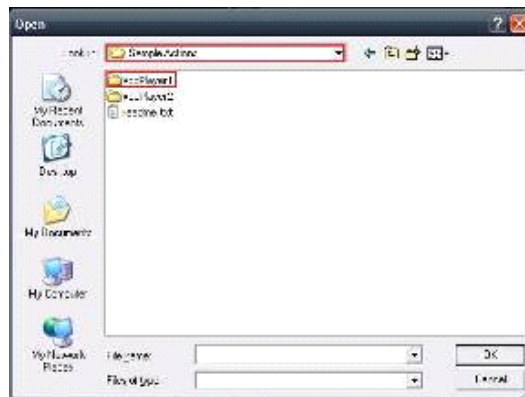
- 5 Set the Post-Record action: Go to **Tools > Options > Post-Record Action**.

A sample batch file is provided to create Silverlight content and launch the Polycom generic players called VodPlayer1 (Freestyle) or VodPlayer2 (Video & Slides). "Vod" stands for Video on demand.

These batch files can be found in C:\Program Files\Polycom\Polycom Recording Studio\Resources\Sample Actions.



- 6 Browse and select **VodPlayer1** action batch file.



- 7 Click OK and you are now ready to play back your content with VodPlayer1.
- 8 Click the Record button to start the Recording
- 9 After a recording has completed, a control screen will appear while the Silverlight VoD is being created by Expression Encoder.

Viewing the Output

To view your Silverlight videos, simply browse to the directory of the recordings:

C:\Archive\[Broadcast Date and Time]\Merger\Expression Encoder Output

This folder will also open automatically upon completion of a recording.



NOTE: If you are not creating a Polycom Rich Experience output, ensure that None is selected under Post-Record Action. If Run is selected and no Polycom Rich Experience Player output type exists, the Polycom PRS 2000 Operator Interface will display an error upon stopping a recording.

Capturing Your Experience

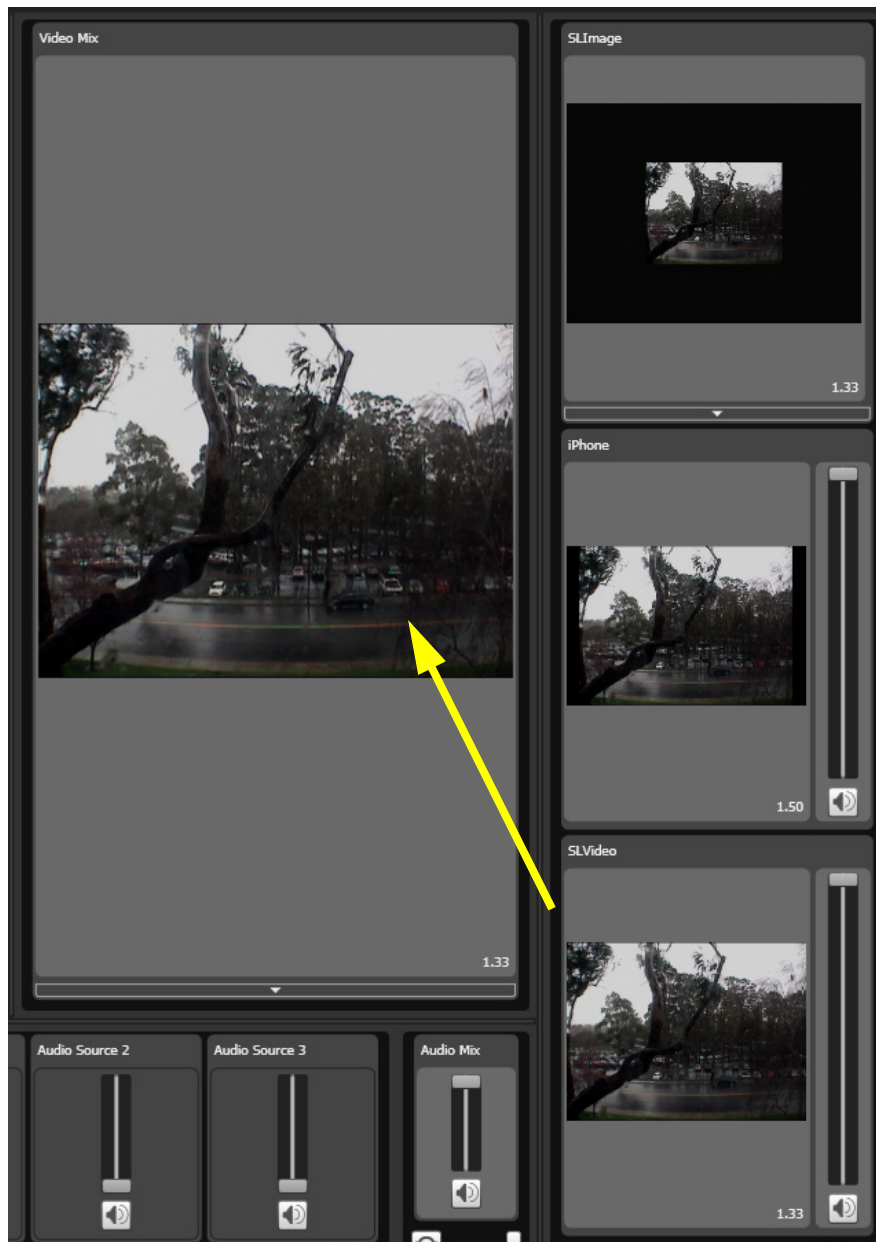
After all inputs have been selected and outputs have been created, you can prepare your recording in the Polycom PRS 2000 Operator Interface.

Starting Capture and Preview

Creating an Output

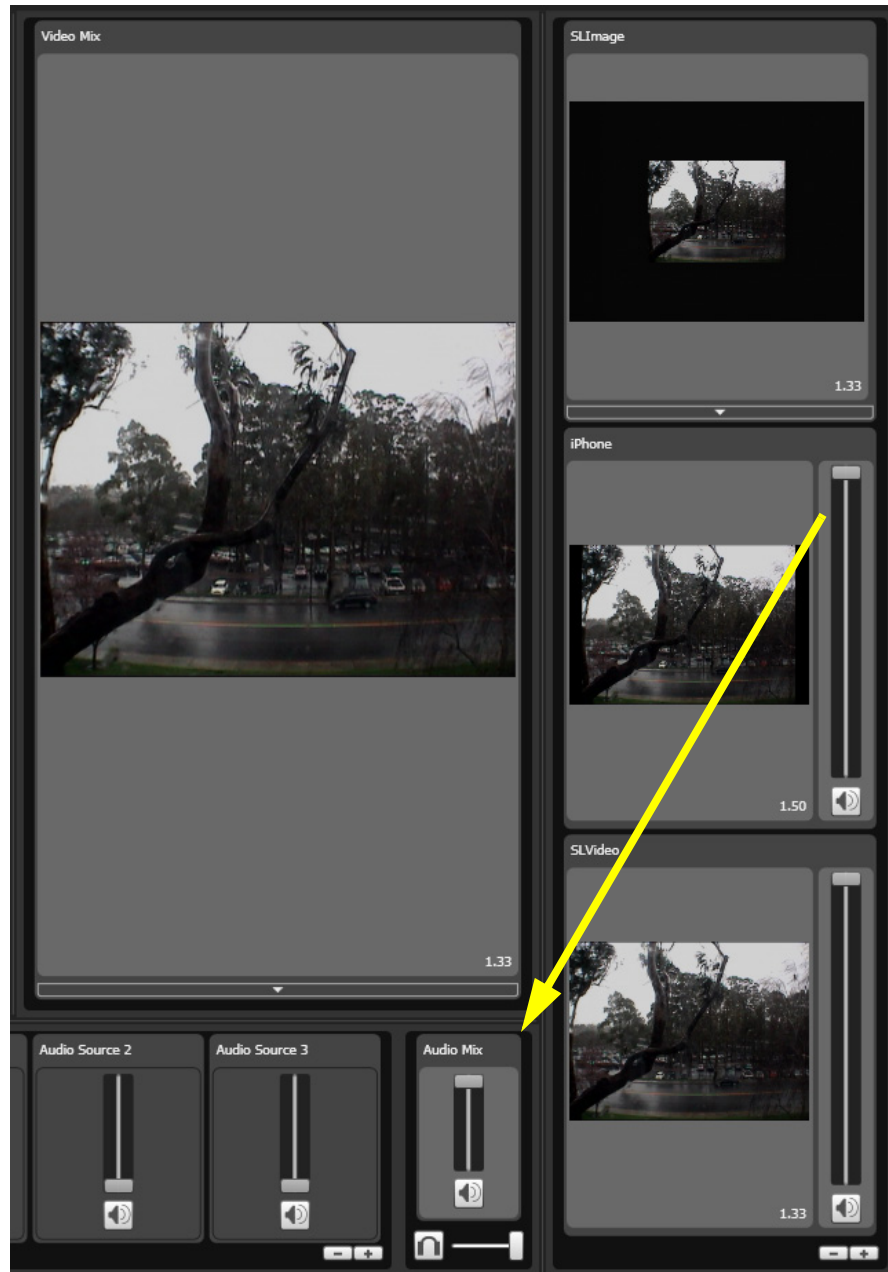
Follow the steps below to define the different outputs as you wish for them to appear.

- 1 Drag and drop the **Video Output** format you want to create into the **Video Mix** window.



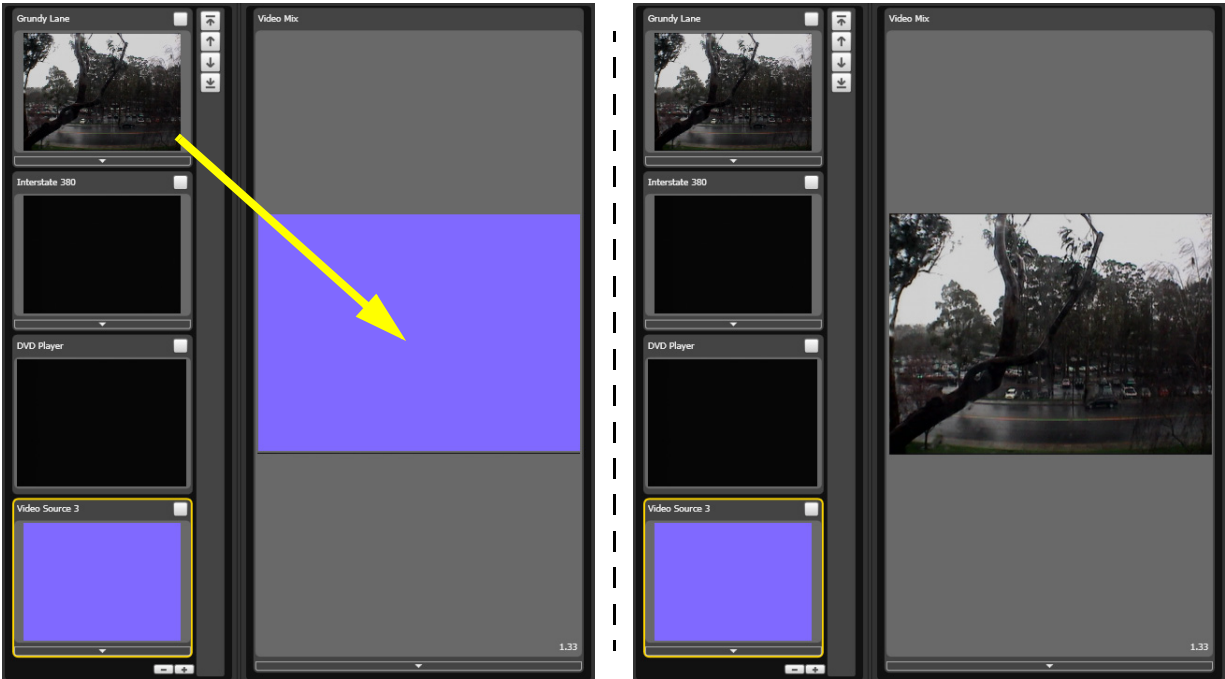
- 2 Drag and drop the **Audio Output format** you want to create into the **Audio Mix** window. The format slider must be dragged directly to the output slider.

You can use the Audio Mix window to mix multiple multiple audio sources (e.g., microphone, iPod, XLR inputs). Use the headphone icon to toggle the audio playback locally; use the mute icon to toggle audio for a given input, output, or audio mix. Verify that the mute button is not selected for the audio mix.



- 3 To move a Video Input into the Video Mix window, click the input and drag it to the **Video Mix** window.

To scale an input in the Video Mix, select the video window you wish to scale then use the scroll button of your mouse.

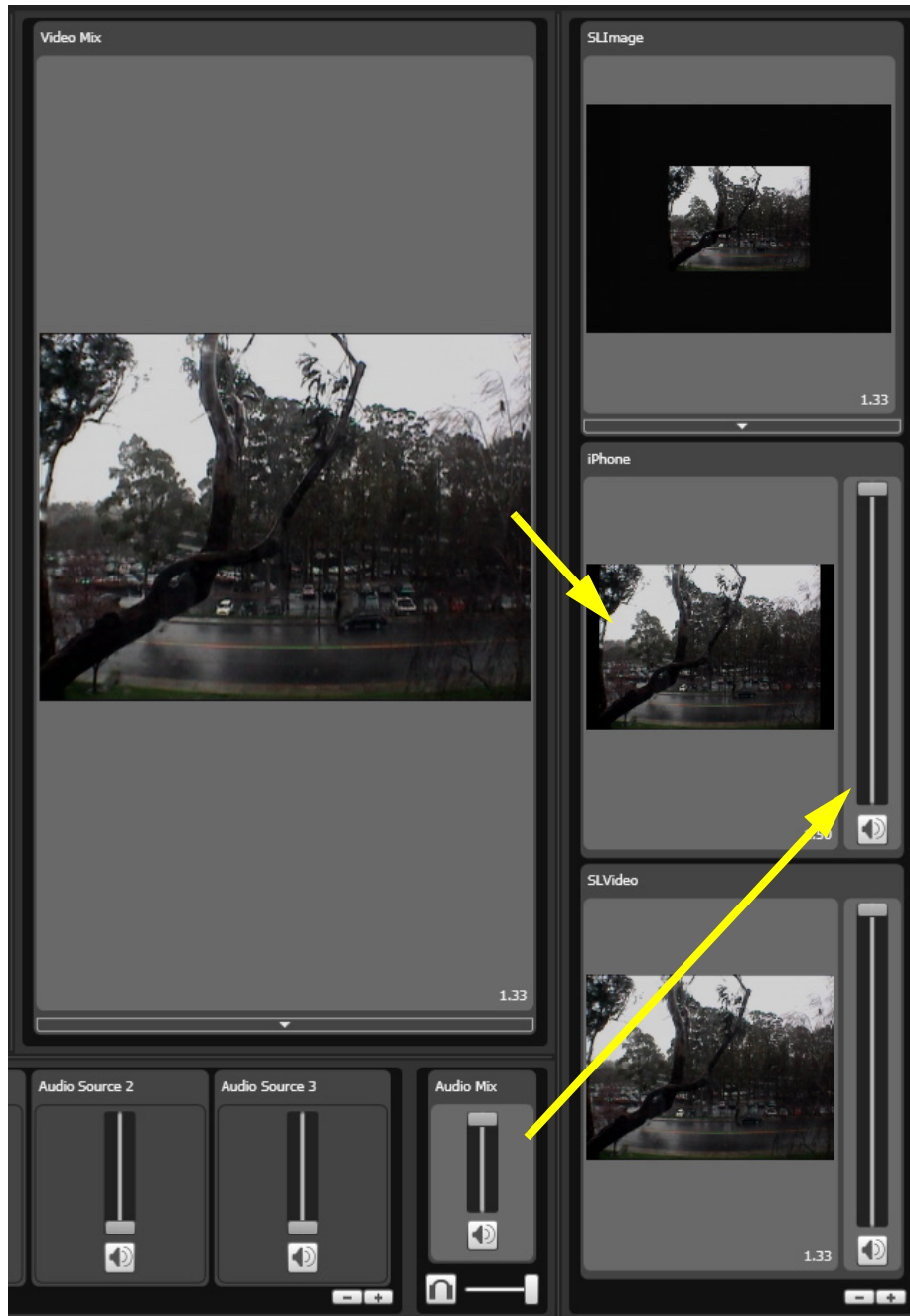


- 4 Drag and Drop the Audio Input you want to put into the Audio Mix window.



- 5 Drag and drop the **Video Mix** you want to record in the **Video Output** window.

Drag and drop the **Audio Mix** you want to put in the **Audio Output** window.



Repeat the steps above for each output type you wish to build to define each experience.

Settings and Mix Templates

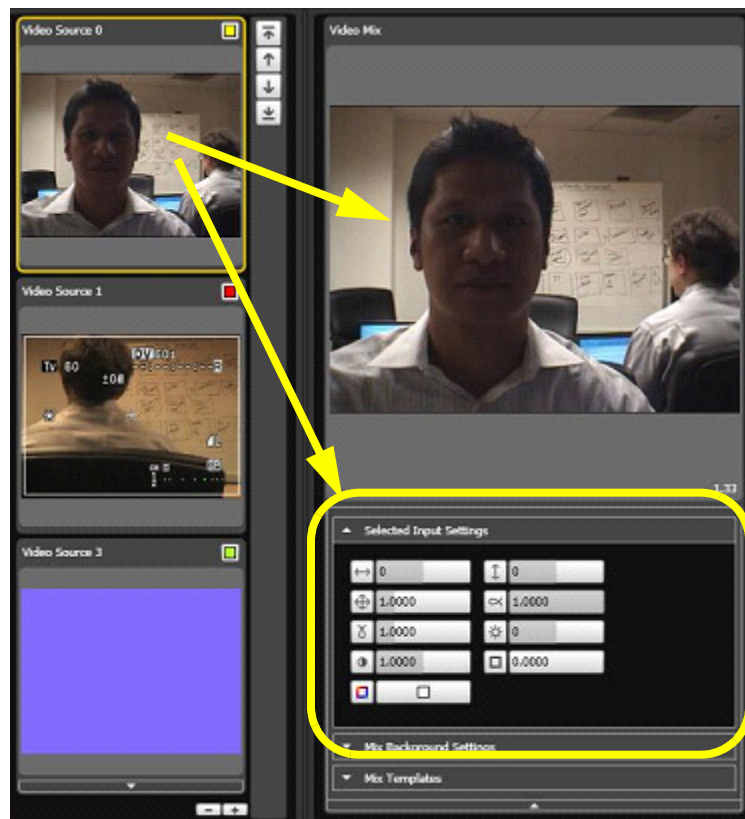
Selected Input Settings

To configure your input, you can also use the Selected Input Settings section located beneath the Video Mix. If the section is minimized, click the bar at the bottom of the Video Mix region.

This section allows you to make changes to the inputs':

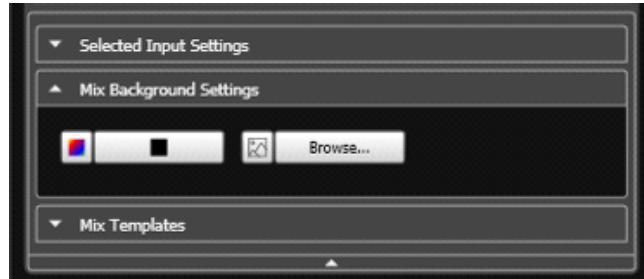
- Size
- Position
- Transparency
- Brightness and Contrast
- Border width and color

Mouse over each icon to learn its function.

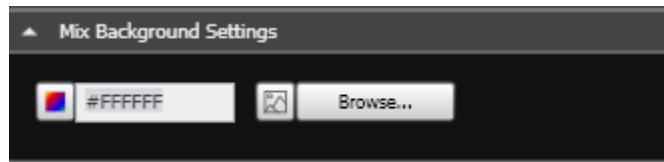


Background

You can specify a color or import an image for the background of a mix in the **Mix Background Settings** section.

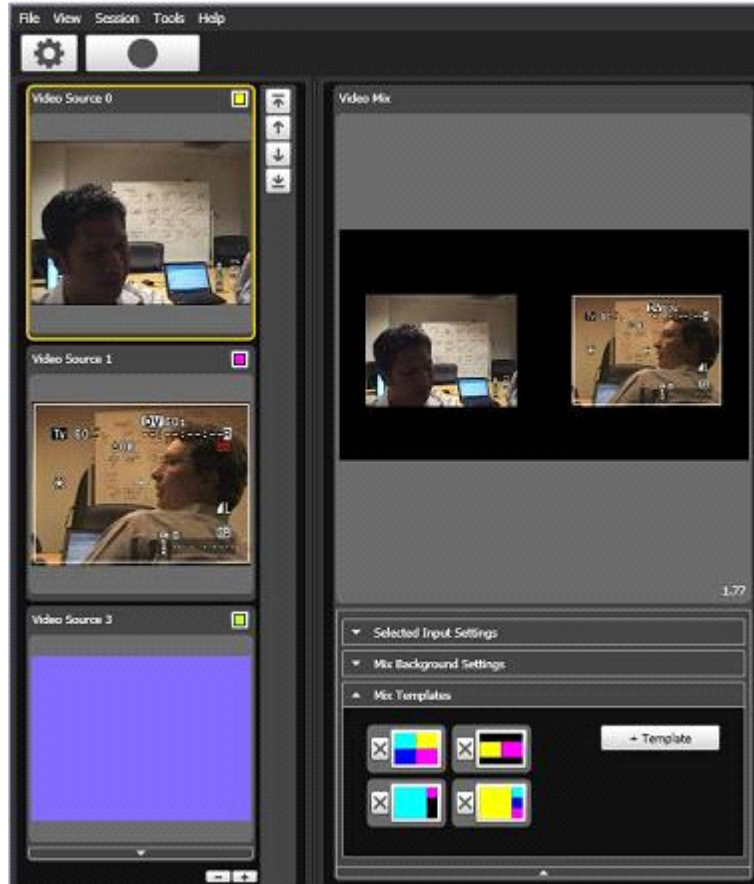


- Enter a background color hexadecimal code or browse to an image file to import a background image.

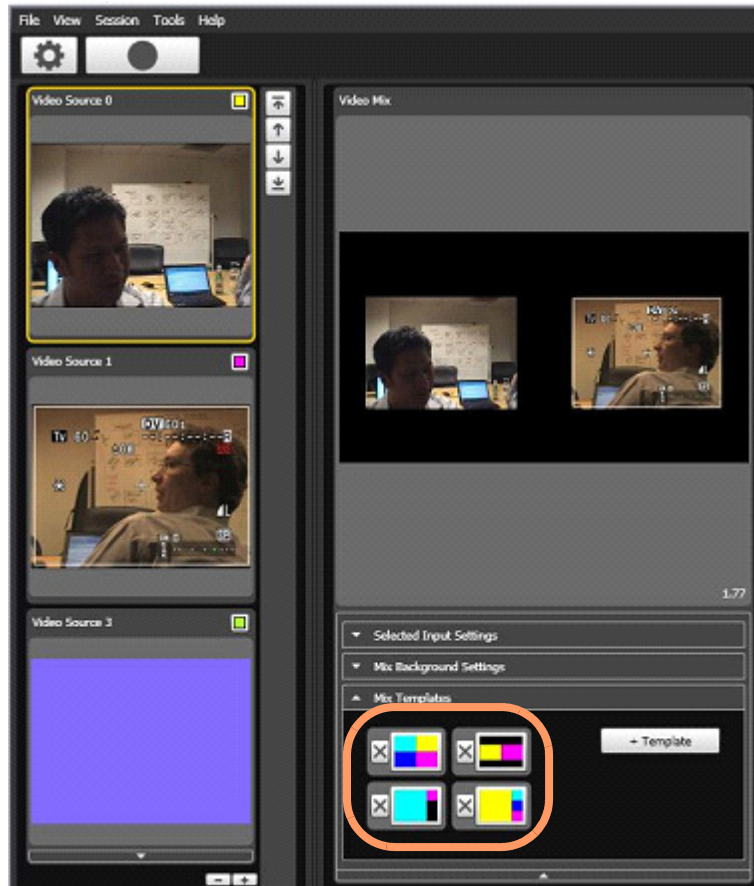


Mix Templates

After a mix is created, it can be saved as a template for future mixes.



The colors correspond to the various inputs.



Outputs Settings

Image

An **Image** output type is used to capture snapshots of video when significant change in the video stream takes place to mark a new chapter in the presentation.

The sensitivity threshold can be adjusted to define the amount of change required for a new snapshot to be taken.



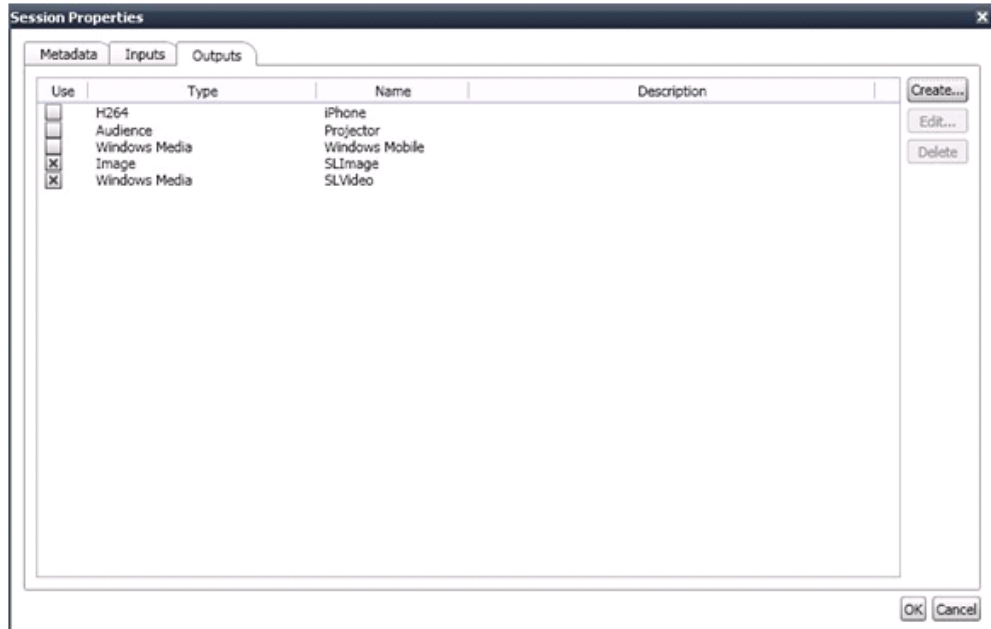
Note about Session Configuration Files

Users of the Polycom PRS 2000 appliance have the ability to create multiple session configuration files. A session consists of the following high level categories, Metadata, Inputs, Outputs, Presets and Video Mix.

Within the metadata category, the user has the ability to assign a title, author, subject, etc. A user could select multiple session configurations with metadata to correspond to different lecturers for their specific presentations. However, a user of the system can modify the title, author, etc. with the same session configuration.

Within the Input category, the user can select the specific video, VGA and audio sources to have active for a given presentation/recording. The first is where the Polycom PRS 2000 appliance is used as a mobile recording system for different studios or rooms throughout an organization. In this use case, different A/V equipment, cables, and VGA sources are typically deployed in each room. By using different session configuration files which correspond to the particular rooms, users can easily map the different audio video layouts to simplify mobility.

For the Output category, the user can use session configuration files in a multitude of ways. First, a user can specify different encoder outputs, which not only include standard settings such as resolution and frame rate, but also feature audio and video mixes. For example, the H.264 encode could be a mix which features a full screen of Video Input 1 and Microphone 1, whereas the Windows Media mix includes 3 video inputs and VGA as well as an audio mix of 3 different audio inputs. The audio outputs could also be extended to support multiple language inputs. Countless permutations exist of different mixes that can be created using the Polycom PRS 2000 appliance.



Presets were discussed in an earlier section. It should be noted however, that presets map to configuration files. As such, a user can define different presets lists for different configuration files. This capability is helpful in use cases again where the system is mobile and different A/V equipment is available in each room and studio.

Finally, the video mix also maintains its settings within the configuration files. This includes saved templates, images used as backdrops, and video and audio levels.

Events

Events can enhance a presentation with the ability to add meaningful data to the presentation during a recording. A presenter can create a chapter point in any part of a presentation, insert captions which will appear in the closed captioning area of the interface, or insert search terms into any point in a recording allowing the user to search on a keyword to locate a specific portion of a presentation.

A Presenter can also add post-production Events to signify to the video editor, including specific notes for the editor as well as segments of the video to be removed via the Polycom PRS 2000 Mark In/Out feature.

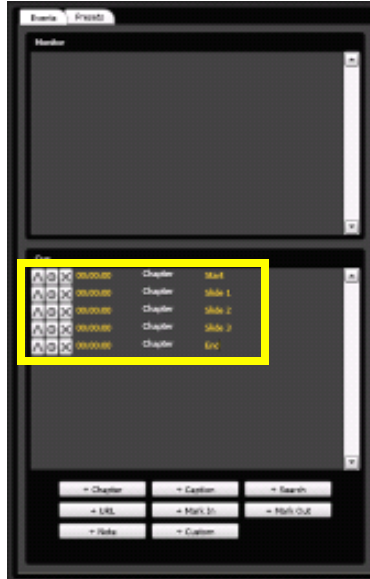
The Events feature is only accessible in the Polycom PRS 2000 Operator Interface and appears on the right window column under the Events tab.



NOTE: Polycom PRS 2000 Events are only used with the Polycom Rich Experience player output type.

To add an event:

- 1 Under the **Cue** pane, click on an Event button (Chapter, Caption, Search, URL, Mark In, Mark Out, Note, Custom).



- 2 Enter the appropriate text in the field provided. This field can be edited
 - 3 Specify a time for the event or click the clock button (at left) to set the current time of the recording.
 - 4 Click on the carat button (at left) to apply it to the timeline. The Event should appear in the Monitor pane.
- 5 To remove an event, click on the O button in the Monitor pane and it will come down into the Cue pane.
 - 6 Click the X button (at left) to cancel the Event completely.

Types of Event

The following list describes each of the Events that can be added during a recording:

Chapters

Chapters can be added to specify areas in a recording a presenter may wish to identify as a key segment in a discussion. By adding a title, a chapter is created with the title the presenter has specified. Note that these Chapters are created in parallel with the chapters created by the Polycom PRS 2000 OCR.

Usage example: A presenter may discuss a single image at length that contains no recognizable text for OCR. The presenter could send Chapter events during the discussion of that image to create chapters so the audience can navigate to a specific portion of the discussion.

Caption

A **Caption** can be added to a recording by sending a Captions event. These captions appear in the closed captioning area typically occupied with closed captioning text that appear when the CC button in the Polycom Rich Media Player is pushed.

Usage example: A presenter can take advantage of this feature by adding captioning notes to display to the audience. This could be useful to display text to highlight key concepts or to display a mathematical formula.

Search

Search terms can be added to a recording to make any segment of a presentation searchable.

Usage example. A presenter with a speech-only discussion will not have automatic chapter creation or searchable text. The presenter may wish to insert searchable keywords pertaining to various segments of the discussion so the viewer can search for that portion of the presentation.

URL

A **URL** event can be sent during the recording if a presenter wishes to add a URL as a resource during a presentation.

Usage example: A presenter may have a web resource available not available in a presentation slide. To make this URL available to the viewer, the presenter can send a URL Event to provide a link of the online resource to the viewer.

NOTE: To use the URL Event requires a custom script to be written to launch a browser window.

Mark In/Mark Out

The **Mark In** and **Mark Out** events are used for post production of a recording. Sending these events during a recording will mark the timeline with "In" and "Out" and is viewable in Microsoft's Expression Encoder. If the presentation requires editing, an editor can view the timeline for these "In" and "Out" marks and remove portions of the video accordingly.

Usage example: A presenter can start a recording as the audience is being seated and may only want to keep his or her speaking portions of the recording. The presenter can then Mark In at the moment the actual presentation is started and Mark Out during intermission or at the end of the presentation. The presenter can Mark In and Out as many times as needed to produce a single video without intermissions or other irrelevant events.



NOTE: For detailed instructions on how to use the Mark In/Mark Out feature, please see [“Using the Mark in/Mark Out Feature in Expression Encoder”](#) on page 47.

Notes

The Note event is used to provide notes for a video editor for post production of a recording if any is required. The note will appear within Microsoft Expression Encoder's Script Commands pane.

Usage example: The presenter can send a Note event during a recording to flag a segment of the video to a post-production editor. This note can specify details about a part of a recording that the presenter would like an editor to review and edit in Expression Encoder 2.

Custom

The **Custom** event is used to add a custom script into the timeline which can be used to launch an event.

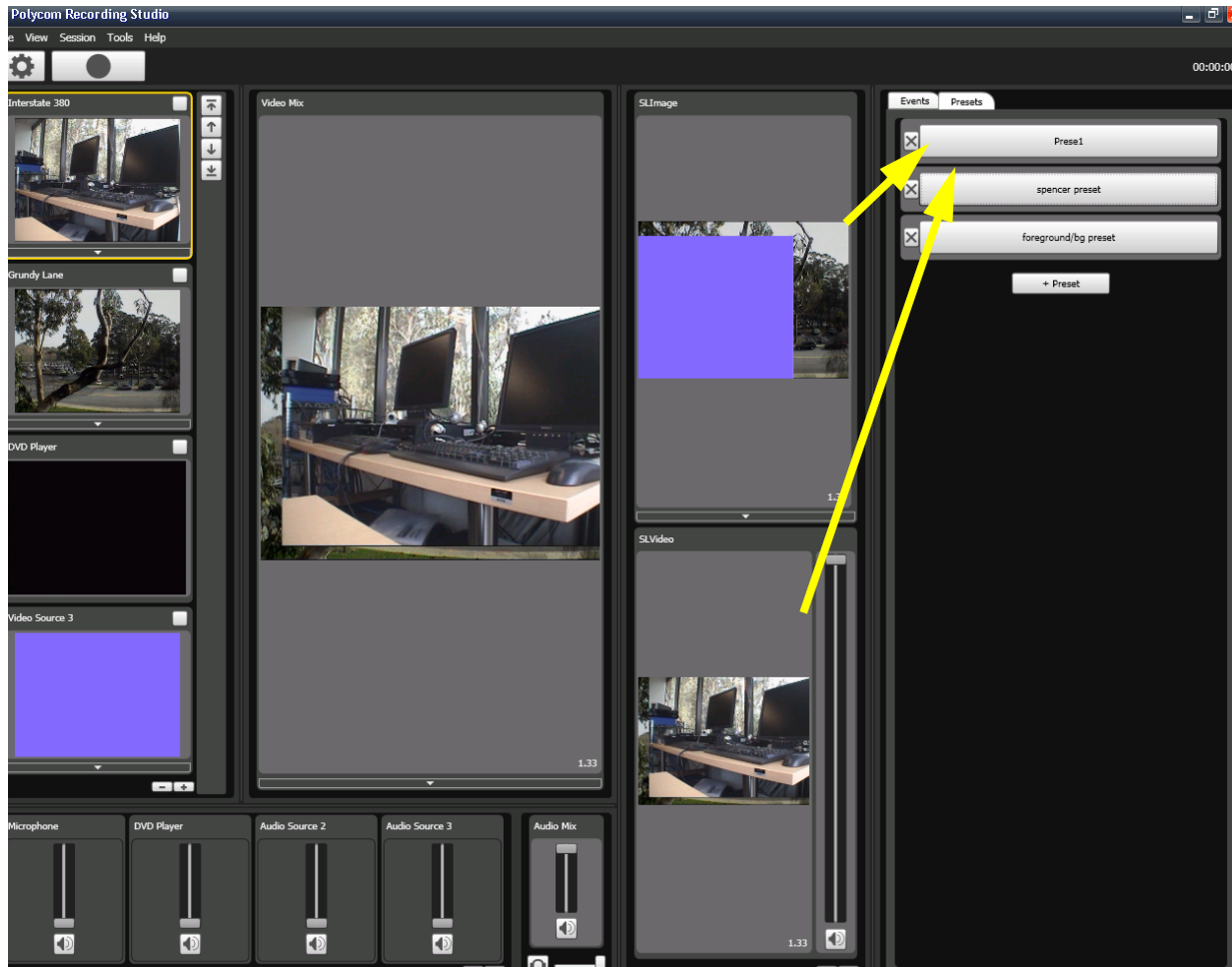
Usage example: With a Custom script event embedded into the video timeline, a script can be written to "listen" for custom scripts to run a command at strategic times to launch a survey window, for example.

Presets

Presets can be made from any mix you define. Multiple combinations of elements including visual layout, audio tracks, volume levels, aspect ratio, PTZ settings, output size and bit rate can be defined.

To use a preset:

Drag and Drop the Video and Audio Outputs you want to put into the Preset:

**To create a new preset:**

- 1 Click on **+PRESET**.

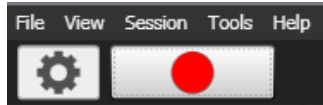
The 'Preset Editor' dialog box is shown. It has a title bar with 'Preset Editor' and a close button. Inside, there are two text input fields: 'Name' and 'Description'. At the bottom right, there are 'OK' and 'Cancel' buttons.

- 2 Enter a name.
- 3 Enter a description.

Recording Your Capture

After all outputs are defined, you can start a recording:

- 1 To start a recording, click the Record button.
- 2 During the recording the Record button flashes in red.



- 3 To stop your recording, click on the Record button once more. An Explorer window will appear. Each output of your recording will be contained in a separate directory.

Each recording is created in a directory named with the recording's date/time stamp. Within this folder are each of the outputs defined in the Session Properties. For example, if a recording session includes an output labeled "Audio Only," a folder named "Audio Only" is created within the date/time stamped directory.

NOTE: When using the Polycom VMC 1000 to start a live recording, do not stop recording locally on the Polycom Recording Studio. For more information on using the PRS 2000 as an encoder in the VMC 1000 platform, consult the Appendix.

Sample contents include:

- iPod
 - Video File (.mpeg4)
 - Manifest
- Image
 - Images files (.jpeg)
 - Manifest
- Silverlight
 - Video File (.wmv)
 - Manifest
 - Expression Encoder Job (.xej)
 - Silverlight player

Using Expression Encoder

To open your recording in Expression Encoder 2, double-click on the .xej file in the output folder.



The Appendix contains additional information on how to use Expression Encoder 2. For more information, visit: <http://www.microsoft.com/downloads>.

NOTE: The Evaluation Copy of Expression Encoder 2 provided with the Polycom Recording Studio can continue to be used indefinitely. After 30 days, a dialog may appear; this dialog can be disregarded.

Polycom Recording Studio Touch

This chapter explains the use of the Polycom Recording Studio Touch interface:

- [About the Polycom PRS 2000 Touch Interface](#)
- [How to Use Polycom PRS 2000 Touch](#)

About the Polycom PRS 2000 Touch Interface

Polycom PRS 2000 Touch is a simplified interface which includes only the functionality a presenter requires to start a recording and switch among defined presets created in the Polycom PRS 2000 Operator Interface.

Polycom PRS 2000 Touch was designed for the presenter and enables the presenter to easily create a recording without having to configure and manage audio and video presets.



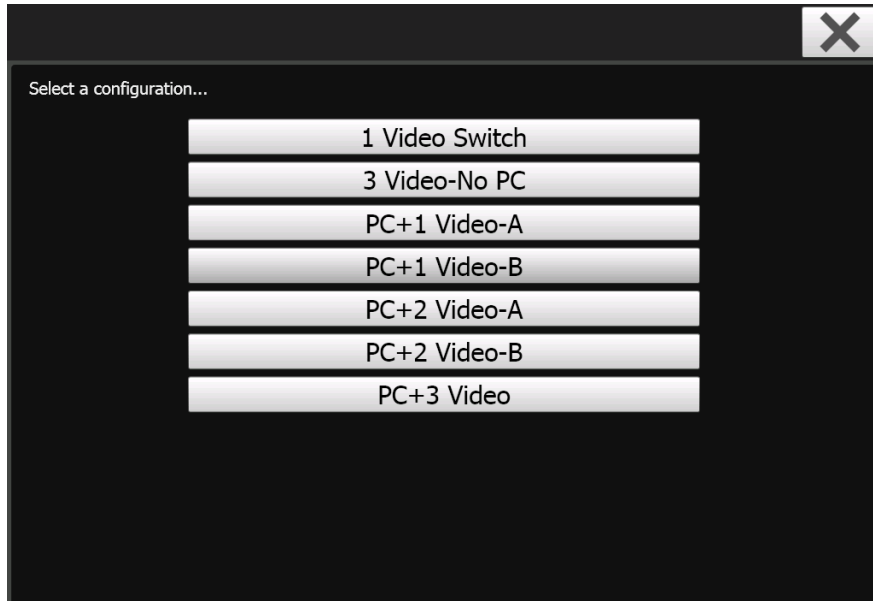
NOTE: Using Polycom PRS 2000 Touch requires presentation configurations to have been previously made in the Polycom PRS 2000 Operator Interface.

How to Use Polycom PRS 2000 Touch

Getting Started

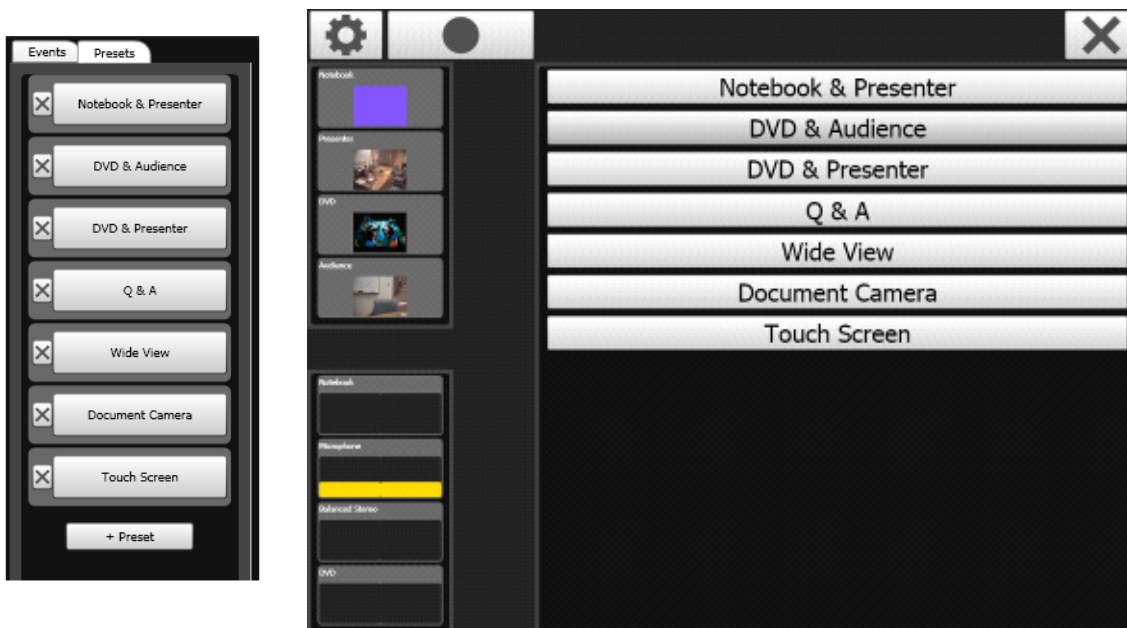
- 1 Double-click the Polycom PRS 2000 Touch shortcut on your desktop to launch the application.

2 Select a configuration.



Presets

Any presets created in the Polycom PRS 2000 Operator Interface will appear in the Polycom PRS 2000 Touch interface. Each preset contains the functionality defined in the Polycom PRS 2000 Operator Interface when they were created.



Recording

To begin a recording, click on the **Record** button.

The **Record** button flashes in red to indicate that a recording is in process.



While the recording is in process, the presenter can deliver a presentation as he or she normally would. The presets can be selected during the recording to switch among the audio and video outputs and to change the position of cameras.

To stop a recording, simply click the **Record** button once more.

Polycom Recording Studio iPhone Demo

This chapter explains the use of the Polycom Recording Studio iPhone Demo tool:

- [About the iPhone Demo](#)
- [Setting Up the iPhone Demo](#)
- [Using the iPhone Demo Application](#)

About the iPhone Demo

The Polycom Recording Studio now includes an iPhone Demo that allows administrators to control the Polycom PRS 2000 through the iPhone. The iPhone Demo provides remote access for starting and stopping recordings; reviewing recent video content in iPhone format; and access to and administration of the full PRS archive.

The iPhone Demo is designed and supported for the Apple iPhone, but will function on any internet-enabled mobile device that supports H.264 video playback.

Using the iPhone Demo Application

The PRS 2000 iPhone Demo application can be accessed via a web browser at the PRS' IP address.

- 1 Launch the web browser on your mobile device.

- 2 The iPhone Demo application can be accessed through a web browser at the PRS appliance's IP address on port 81, following the convention `http://ApplianceIP:81`.

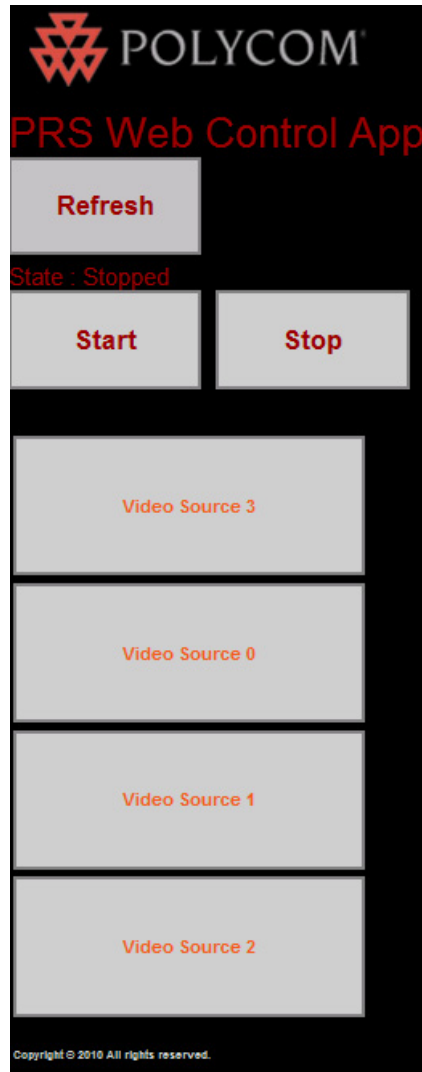
For example, if the IP address of the PRS is 1.1.1.1, the application can be accessed at `http://1.1.1.1:81`.

- 3 The iPhone Demo landing page should now appear.



To make a recording:

- 1 Click **Remote** to launch the control interface..



- 2 A list of presets, defined in the PRS 2000 Operator Interface, will appear as part of the remote control interface.



NOTE: Clicking a preset in this interface will change only the Silverlight SLVideo output. H.264 output configuration is uniquely defined in the Operator Interface and cannot be changed via the iPhone Demo Application.

- 3 Click **Start** to start recording on the PRS 2000 appliance.
- 4 Click **Stop** to stop recording. The recording will automatically save and archive.

- 5 To view the recording in H.264 format, navigate to the iPhone demo application landing page and click **Last Recording**. The recording will then play.
- 6 Click **Archive** to view the C:\Archive directory of the Polycom PRS 2000 Appliance. The archives of the PRS, including iPhone content, can be accessed and viewed (if the mobile device supports the content format) through this menu.

Wednesday, January 27, 2010 11:52 AM	<dir> 1-27-2010 10.52.05
Wednesday, January 27, 2010 11:53 AM	<dir> 1-27-2010 10.53.37
Wednesday, January 27, 2010 11:55 AM	<dir> 1-27-2010 10.55.12
Wednesday, January 27, 2010 12:07 PM	<dir> 1-27-2010 11.07.15
Wednesday, January 27, 2010 3:09 PM	<dir> 1-27-2010 2.09.43 P
Wednesday, January 27, 2010 7:27 PM	<dir> 1-27-2010 6.26.57 P
Thursday, January 28, 2010 3:23 PM	<dir> 1-28-2010 11.34.17
Thursday, January 28, 2010 3:57 PM	<dir> 1-28-2010 2.57.14 P
Thursday, January 28, 2010 10:31 AM	<dir> 1-28-2010 9.31.33 A
Tuesday, January 05, 2010 6:36 PM	<dir> 1-5-2010 5.36.26 PM
Thursday, January 07, 2010 2:23 PM	<dir> 1-7-2010 1.23.57 PM
Thursday, January 07, 2010 4:31 PM	<dir> 1-7-2010 3.31.20 PM
Thursday, January 07, 2010 4:32 PM	<dir> 1-7-2010 3.32.01 PM
Thursday, January 07, 2010 4:33 PM	<dir> 1-7-2010 3.33.11 PM
Thursday, January 07, 2010 4:37 PM	<dir> 1-7-2010 3.37.20 PM
Friday, January 08, 2010 12:13 PM	<dir> 1-8-2010 11.13.43 A
Friday, January 08, 2010 3:59 PM	<dir> 1-8-2010 2.59.47 PM
Wednesday, January 27, 2010 11:55 AM	<dir> LastRecording

Polycom VMC 1000 Integration

This appendix explains the use of the Polycom PRS 2000 as an encoder for the Polycom VMC 1000 appliance. This appendix contains the following sections:

- [Polycom VMC 1000 Integration](#)
- [Configuring the PRS 2000 as an Encoder in the VMC 1000](#)

Polycom VMC 1000 Integration

The Polycom Recording Studio can act as an encoder for the Polycom Video Media Center 1000 versions 2.0 and higher. For more detailed information on the Polycom VMC 1000 2.0, please consult the Polycom VMC 1000 Administrator Guide.

Polycom PRS 2000 to VMC 1000 Port Requirements

On VMC 1000

The VMC 1000 uses port 80 to communicate with the Web service installed on the PRS 2000. It can be changed in encoder configuration. The Web Service uses port 8099 to communicate with the PRS 2000. The encoder profile port is used as a broadcast port.

- Encoder communication port: **80**
- Encoder Profile Port: any value other than **8099**

On PRS 2000

- Remote control port: **8099**

VMC to Akamai communication port

- Communication port from PRS 2000 Encoder to Akamai: **80**

Encoder Archive from PRS 2000 to VMC

- Communication port from PRS 2000 Encoder to Akamai: **80**
- For archiving: **80**

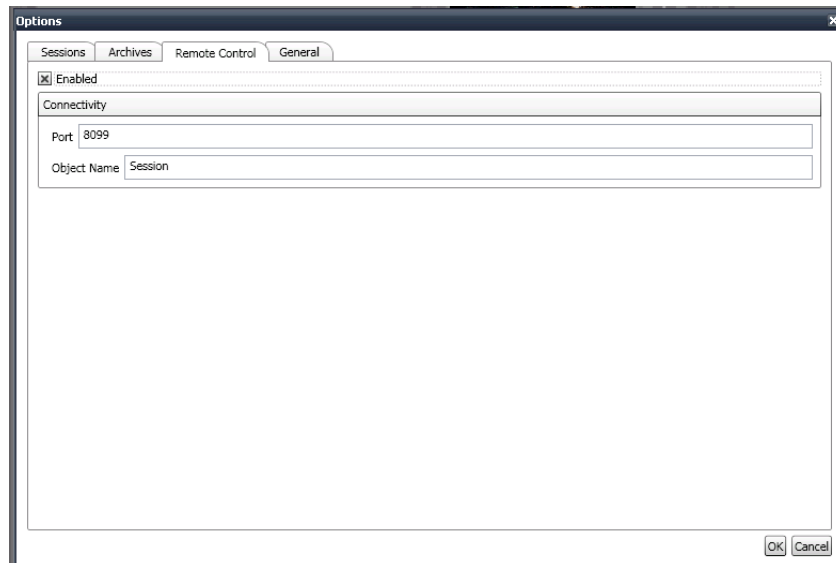
Polycom PRS 2000 Configuration

Set ASP.NET version for the Default Web Site to 2.0.x:

- 1 Click on **Start** button.
- 2 Select **Administrative Tools > Internet Information Services (IIS) Manager** from Windows menu.
- 3 Select **[Your Computer Name] (local computer) > Web Sites** on the manager's right pane.
- 4 Locate Default Web Site in the list and click with right button on it.
- 5 Select Properties in context menu.
- 6 Click on ASP.NET tab in Default Web Site Properties dialog.
- 7 Select ASP.NET version from the combo box.

Enable remote control in PRS 2000:

- 1 Start Polycom Recording Studio application.
- 2 Select **Tools > Options**.
- 3 Click on **Remote Control** tab in **Options** dialog.



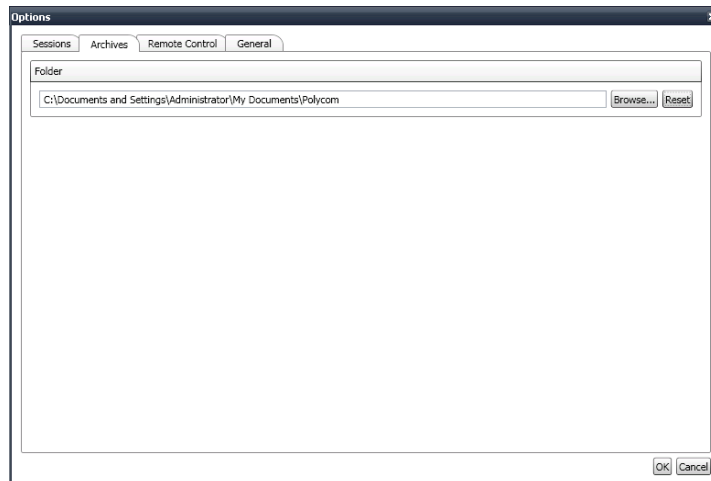
- 4 Check **Enabled** checkbox.
- 5 Type **8099** in Port input box.
- 6 Click **OK**.

Set up PRS 2000 folder:

- 1 Right click on PRS 2000 folder in Windows Explorer.
- 2 Select **Properties** from context menu.
- 3 Click on **Security** tab in PRS 2000 Properties dialog.
- 4 Click on **Add...** Button.
- 5 Type **ASPNET** in "Enter the object names to select" input box in Select Users or Groups dialog.
- 6 Click on **Check Names** button.
- 7 Click on **OK** button.

Set archive to PRS 2000 folder:

- 1 Start Polycom Recording Studio Application.
- 2 Select **Tools > Options** menu.
- 3 Click on **Archive** tab in Options dialog.
- 4 Browse to PRS 2000 folder.

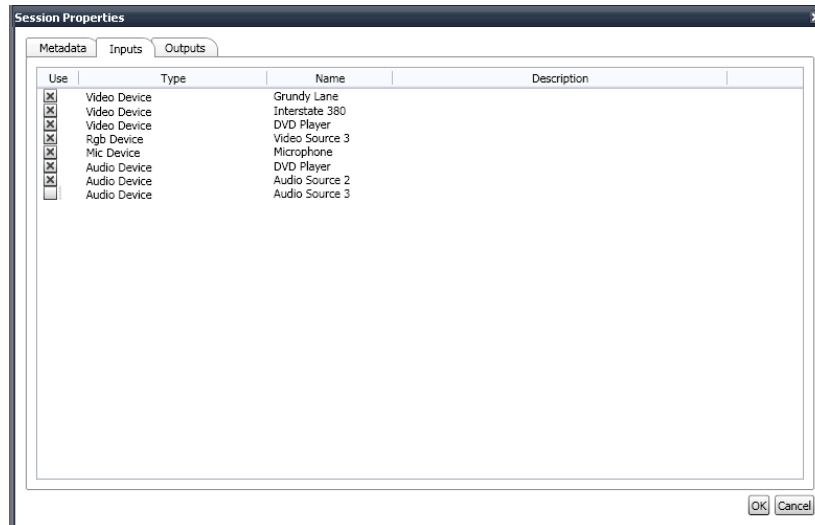


- 5 Click **OK**.

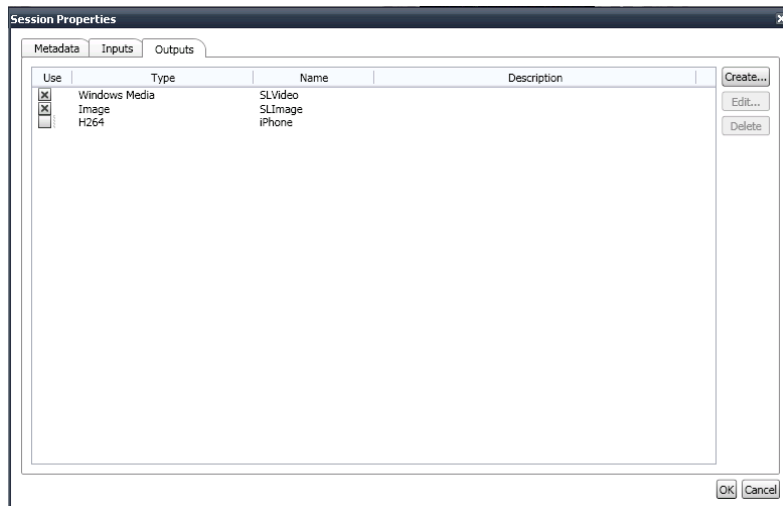
Live Broadcast Settings

When using the Polycom Recording Studio for a live broadcast, special input, and output configuration is required.

- 1 Within the Polycom Recording Studio, navigate to **Session > Properties**. Click the **Inputs** tab.

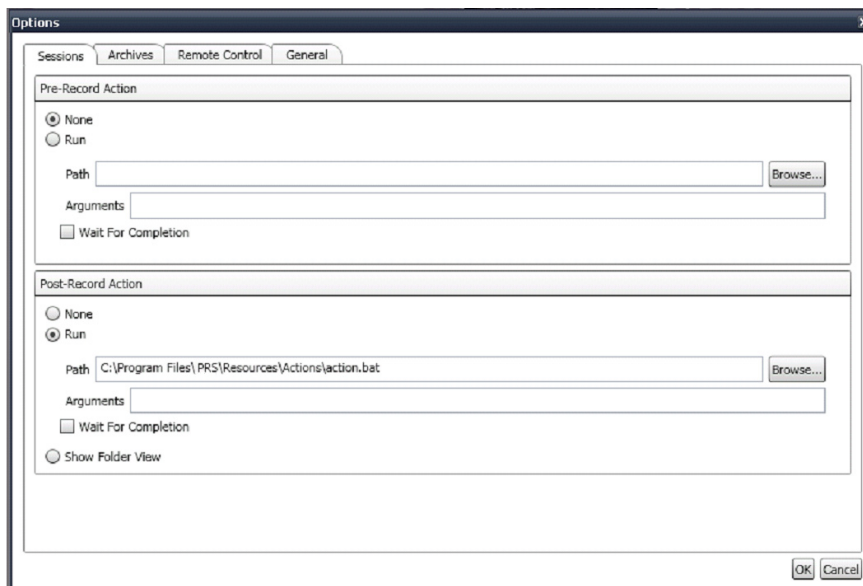


- 2 To successfully conduct a live broadcast, any one input must be left unselected.
- 3 Click the **Outputs** tab.



- 4 **SLVideo** and **SImage** must be selected. All other outputs are optional.
- 5 Navigate to **Options > Sessions**.

6 Select **Run** for the Post-Record Action.



Configuring the PRS 2000 as an Encoder in the VMC 1000

In order to use the Polycom Recording Studio as an encoder in the Polycom VMC 1000, you must first configure a PRS 2000 encoder in the Polycom VMC administrative interface.

To add a PRS 2000 encoder:

- 1 Log into the Polycom VMC 1000 Administrative Portal.
- 2 Navigate to **Resources > Encoders**.
- 3 Click the **Add** button.
- 4 From the context menu, choose **Polycom Recording Studio**.
- 5 Enter the Polycom Recording Studio device specifications. The communication port must have a value of 80.
- 6 Select **Add** under Encoder Profile.
- 7 Specify a name and optional description.
- 8 Select **Enable Archiving**.
- 9 Provide an Encoder Output Port. This value must not be 8099.
- 10 Provide a public URL, if necessary, and specify video size, frame rate, video bit rate, and audio bit rate.
- 11 Click **Save**.

Uploading PRS 2000 Archive

To upload a PRS 2000 archive to the VMC:

- 1 Find the output of the Polycom Rich Experience Player on the Recording Studio appliance under C:\Archive\[broadcast date and time]\Merger\Expression Encoder Output.
- 2 Save the content of the folder in zip file.
- 3 Open the Polycom VMC 1000 Administrative Interface.
- 4 Navigate to **Programming > Content**. Select **Add Item**.
- 5 From the context menu that appears, choose **Complex Presentation**.
- 6 Upload the archive zip file.
- 7 Provide the program specifications and click **Save**. The archive should now reside in the **Content Repository**, where it can be made viewable as a Program.

Expression Encoder Guidelines

This appendix provides guidelines for the use of Expression Encoder tool. This appendix contains the following sections:

- [Expression Encoder Tips](#)
- [Silverlight Recording Layout](#)

Expression Encoder Tips

Editing The Metadata

In order to change the values of the Metadata of a recording in Expression Encoder, here are the steps you'll have to follow:

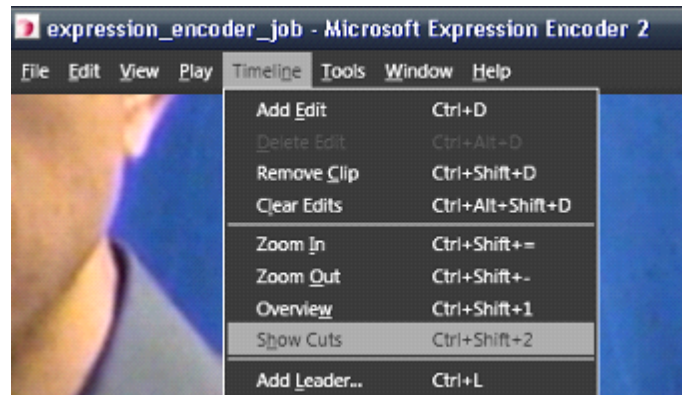
- 1 Open the folder of your recording.
- 2 Open the folder named **Merger**.
- 3 Double click on the file named `expression_encoder_job.xej`.
- 4 Expression Encoder opens. On the right of the screen you'll find a box "Scripts Commands".
- 5 Modify the values of the metadata you want to edit.
- 6 Once you finished editing the metadata, re-encode your recording.
- 7 Open the Expression Encoder Output folder (this folder is in the Merger folder). Delete the file named `media.wmv` and rename the file named `SLVideo_media.wmv` into `media.wmv`.

Using the Mark in/Mark Out Feature in Expression Encoder

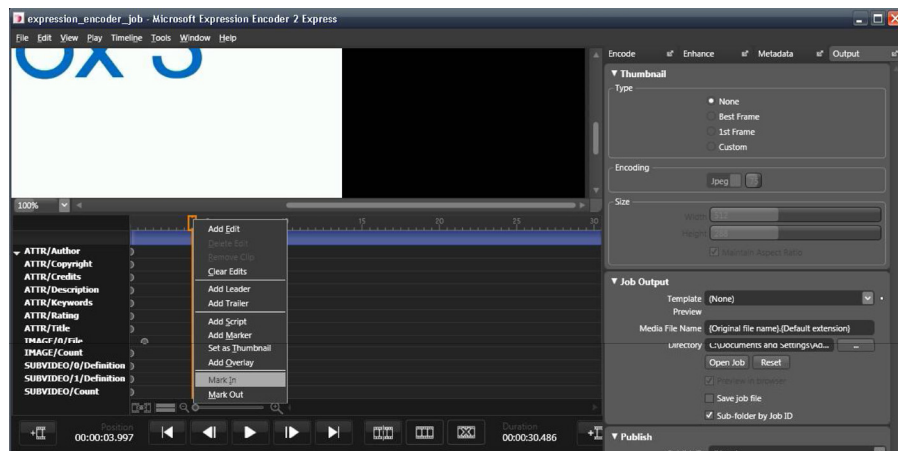
Using the Mark In and Mark Out Events requires modifications to the timeline in Expression Encoder. The steps below illustrate how to use the Mark In and Mark Out points to create a video for the Polycom Rich Experience Player to include only the portions of the video the presenter has specified. This process can be handled by someone with basic video editing knowledge.

Note: When using the Mark In and Mark Out feature, the presenter should "Mark In" to signify the start of the presentation video. The Mark In and Mark Out feature is only available for Polycom Rich Experience Player playback. All other output types will play the entire duration of the presentation.

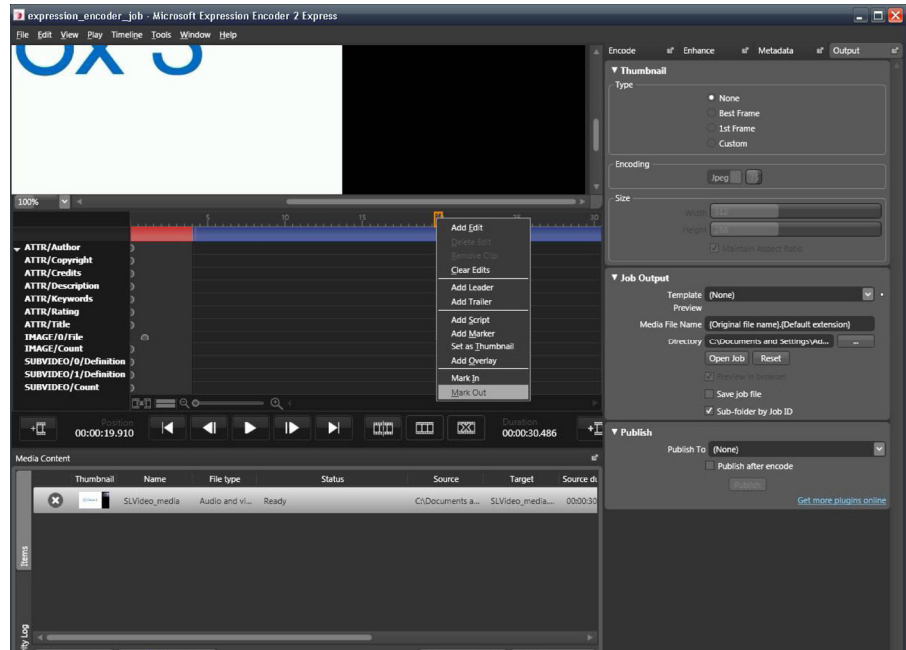
- 1 Locate and launch the .xej (Expression Encoder) file in the directory containing the Polycom Rich Experience Player output files.
- 2 To view the cut points where the Mark In and Mark Out points are, go to **Timeline > Show Cuts**.



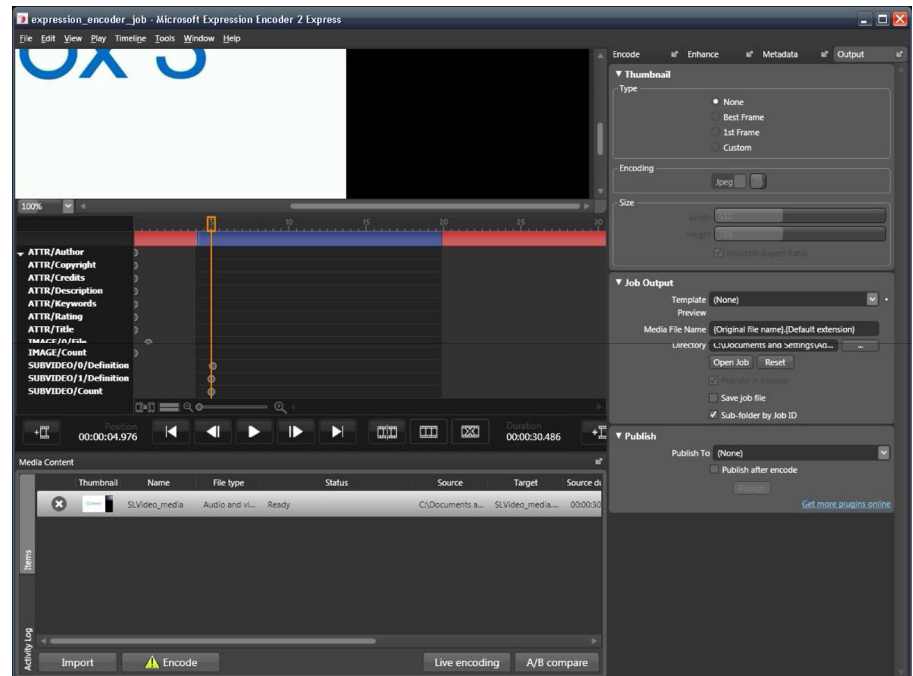
- 3 You should now see the timeline divided into red and blue color-coded "cuts." The blue areas indicate the areas within each Mark In and Mark Out pair. These are the areas we wish to be viewable in the Polycom Rich Experience Player.
- 4 In the timeline, select the start time for the trim. Right click and select **Mark In**. The area in the timeline before this marker will turn red.



- Select the end time for the trim in the timeline. Right-click and select **Mark Out**.

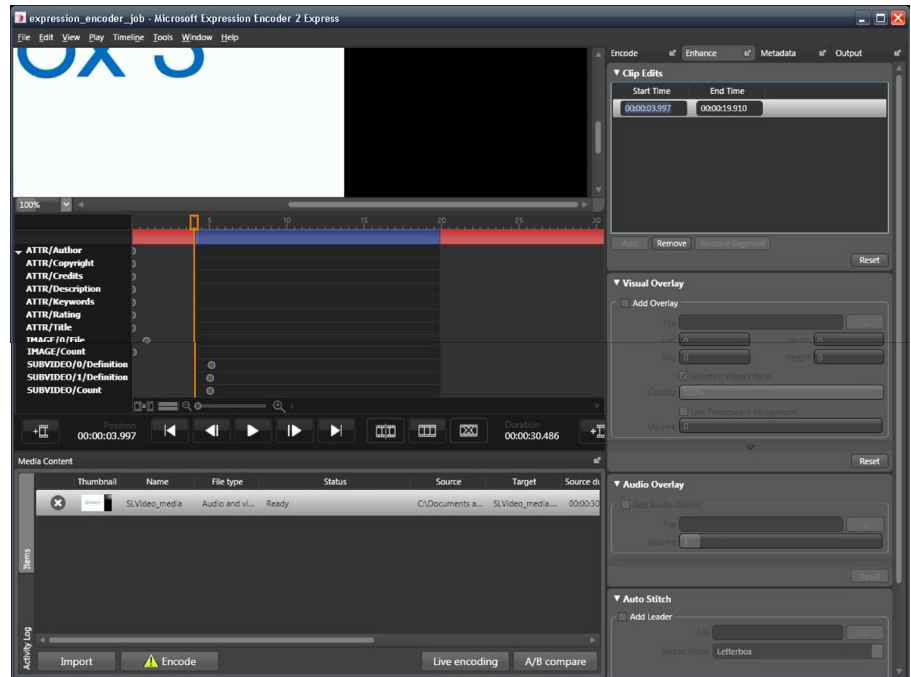


- Drag all of the 'SUBVIDEO' markers onto the area delimited by the markers (the blue area).



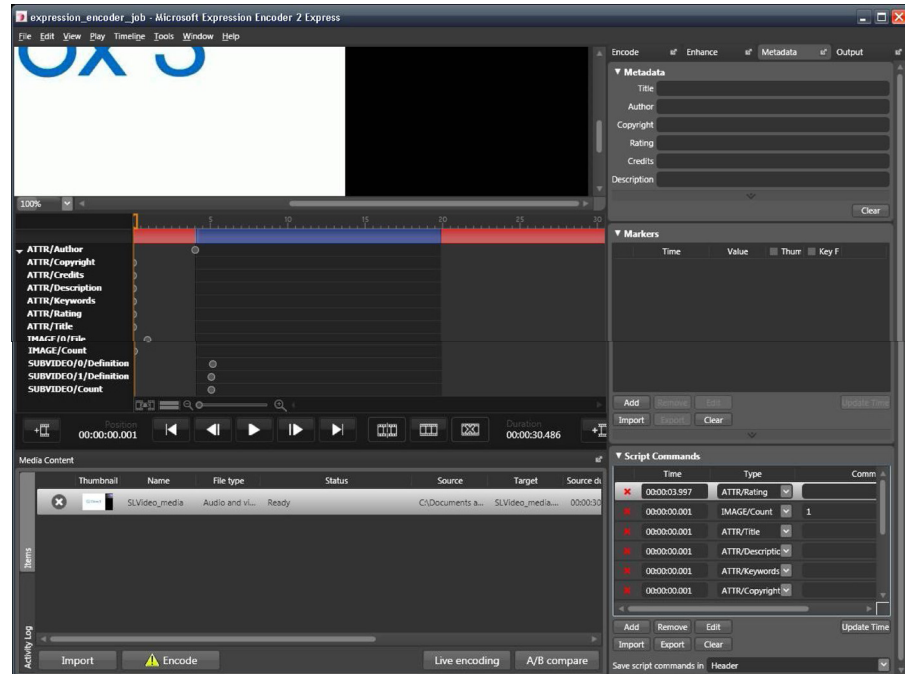
- 7 In the right-hand menu, select the **Enhance** tab. Copy the start time of the trimmed section to the clipboard (CTRL+C).

Paste the start time in a safe field and add one millisecond to the value. Copy this new value to the clipboard.



NOTE: The precision for the time is intended to ensure a correct display in the Silverlight player(s).

- 8 In the right-hand menu, select the **Metadata** tab. Copy the start time for all 'ATTR' script commands accessible under **Script Commands** and press **Enter** to validate.



- 9 If you have changed the name of the recording from the default timestamp convention:
- Navigate to the **Output** tab.
 - Click the ... (browse) button in the **Job Output** section.
 - Verify that the output folder corresponds to the Merger folder of the recording.
- 10 Navigate to **File > Save Job**.
- 11 Click the **Encode** button. Wait for completion.
- 12 To verify the timeline modifications were successful, open `player.htm` to launch the Polycom Rich Experience Player.

Silverlight Recording Layout

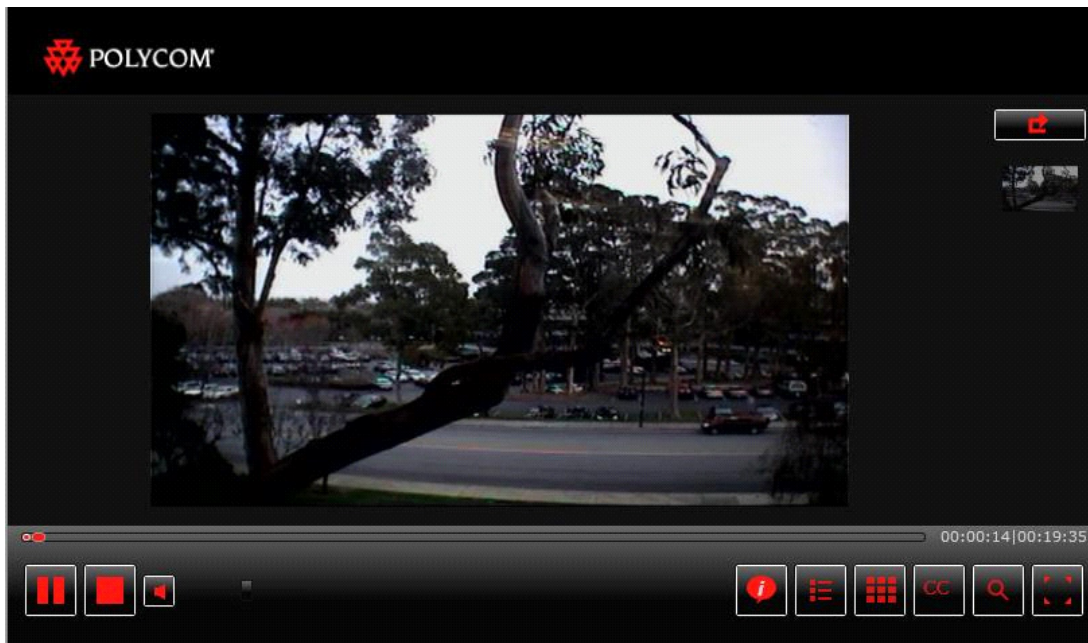
The Polycom PRS 2000 device has as an option two of its outputs entitled "SLVideo" and "SLImage," both of which are used by the system to generate a Silverlight VoD presentation package after a recording is complete.

Using the inherent capabilities of the Polycom PRS 2000 device, multiple video and VGA inputs are detected and extracted automatically for the purpose of rendering the Silverlight package.

The Expression Encoder output folder contains the Windows Media file, HTML, corresponding snapshots to timestamps, and the XAP file. The Silverlight VoD will also seamlessly render chapter titles from OCR (Optical Character Recognition), thumbnails corresponding with screenshots, metadata, and other information. See the diagram below for more information.



NOTE: Outputs designated for Silverlight must conform to the provided naming designation, specifically "SLVideo" for the media output and "SLImage" for image snapshots.



- 1 **Video Input One:** Controls available to the viewer are: rendering the window transparent, resizing, toggling full screen on/off, and completely closing the window.
- 2 **Video Input Two:** Same controls available as above.
- 3 **Other Player Controls:**



a Expose Title, Author, and Description as an overlay.



b Overlay OCR chapters as URLs with assigned timestamps. Navigate directly to the point of time by selecting a URL.



c Overlay screen capture snapshots as URLs with assigned timestamps. Navigate directly to the point of time by selecting a URL.



d Expose Closed Captions if provided.



e Search OCR within player which will expose URLs for easy navigation to timestamps within recording.



f Enable full-screen mode.

- 4** If the viewer has disabled or exited one of the other video inputs in the Silverlight VoD, these controls will allow you to restore the video input or restore the whole configuration back to default.

As referenced earlier, two Silverlight VoD Players, or recording layouts, are provided on default with the Polycom PRS 2000: VoDPlayer1 (Freestyle) or VoDPlayer2 (Video & Slides).

- 1 If creating a new output profile in the video mix, the video input borders must not overlap with other images or the boundaries of the total mix profile itself. Otherwise the Silverlight VoD will not capture the coordinates of the video inputs and will render a recording incorrectly.

